

Name: \_\_\_\_\_ Period: \_\_\_\_\_

### Property Practice

Match the property name with the proper equation. Use the following names:

*Commutative Property of Addition, Commutative Property of Multiplication, Associative Property of Addition, Associative Property of Multiplication, Multiplicative Identity Property, Additive Identity Property, Distributive Property.*

1. \_\_\_\_\_  $8 + 12 = 12 + 8$
2. \_\_\_\_\_  $3(5 + 2) = (3 \times 5) + (3 \times 2)$
3. \_\_\_\_\_  $9 + 0 = 9$
4. \_\_\_\_\_  $4 \times (3 \times 7) = (4 \times 3) \times 7$
5. \_\_\_\_\_  $7 + 4 + 6 = 6 + 4 + 7$
6. \_\_\_\_\_  $8 \times 3 = 3 \times 8$
7. \_\_\_\_\_  $6,000 \times 1 = 6,000$
8. \_\_\_\_\_  $(6.3 + 4.9) + 2.3 = 6.3 + (4.9 + 2.3)$
9. \_\_\_\_\_  $9 \times 5 \times 6 = 6 \times 5 \times 9$
10. \_\_\_\_\_  $(5 \times 10) + (5 \times 5) = 5(10 + 5)$
11. \_\_\_\_\_  $(9 \times 9) \times 17 = 9 \times (9 \times 17)$
12. \_\_\_\_\_  $1 + 0 = 1$
13. \_\_\_\_\_  $(3 + 5) + 11 = 3 + (5 + 11)$
14. \_\_\_\_\_  $13.4 \times 1 = 13.4$

Find the missing number in each of the following equations:

- |     |   |             |     |                             |             |
|-----|---|-------------|-----|-----------------------------|-------------|
| 15. | $9 + 16 = a + 9$                                | $a =$ _____ | 19. | $(2 + 6) + 1 = e + (6 + 1)$ | $e =$ _____ |
| 16. | $4 \times (3 \times 2) = (4 \times b) \times 2$ | $b =$ _____ | 20. | $18 \times f = 18$          | $f =$ _____ |
| 17. | $c + 20 = 20$                                   | $c =$ _____ | 21. | $14 + 6 + 7 = g + 6 + 14$   | $g =$ _____ |
| 18. | $6(5 + 4) = (d \times 5) + (6 \times 4)$        | $d =$ _____ | 22. | $19 \times 1 + h = 19$      | $h =$ _____ |

Use the Distributive Property to help you solve the following multiplication problems mentally:

- |     |  |     |  |
|-----|--|-----|--|
| 23. | $8 \times 16 = (\underline{\quad} \times 10) + (\underline{\quad} \times 6)$ | 24. | $74 \times 2 = (70 \times \underline{\quad}) + (\underline{\quad} \times 2)$ |
|     | $= (\underline{\quad}) + (\underline{\quad})$                                |     | $= (\underline{\quad}) + (\underline{\quad})$                                |
|     | $= \underline{\quad}$  |     | $= \underline{\quad}$  |